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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/843,000	04/26/2001	Frank Charles Pagano	Rev 98-25	7885
26807	7590	10/16/2007		
JULIE BLACKBURN REVLON CONSUMER PRODUCTS CORPORATION 237 PARK AVENUE NEW YORK, NY 10017			EXAMINER LANDAU, SHARMILA GOLLAMUDI	
			ART UNIT 1616	PAPER NUMBER
			MAIL DATE 10/16/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 09/843,000	<b>Applicant(s)</b> PAGANO ET AL.	
	<b>Examiner</b> Sharmila Gollamudi Landau	<b>Art Unit</b> 1616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 August 2007.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 61, 64, 66, 68 and 81-88 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 61, 64, 66, 68, 81-88 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some    \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

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### **DETAILED ACTION**

Receipt of Request for Continued Examination, Remarks, and Rule 132 Declaration filed 8/3/07 is acknowledged. Claims 61, 64, 66, 68, 81-88 are pending in this application. Claims 1-60, 62-63, 65, 67, 69-80 stand cancelled.

#### ***Miscellaneous Remarks***

The examiner notes that the amendments are not in compliance with Rule 1.121. Applicant must include a complete listing of all claims. For instance, claims 1-60, 62-63, 65, must be presented with the proper claim identifier, i.e. "cancelled".

#### ***Response to Arguments and Rule 132 Declaration***

Applicant Rule 132 Declaration filed 8/3/07 provides a comparison of BMA/AA copolymer and the prior art's BMA/AA copolymer using a 80/20 ratio and 85:15 ratio. It is noted that applicant's Declaration demonstrates that the prior art's copolymer is brittle and cracks and chips quicker. Therefore, applicant argues that the Rule 132 Declaration establishes that the instant BMA/AA is softer and not prone to cracking which makes it suitable for use in nail enamels.

The Declaration under 37 CFR 1.132 filed 8/3/07 is insufficient to overcome the rejection of the claims based upon the rejections of record (Perronin et al in view of Strella and Perronin by itself) as set forth in the last Office action for the following reasons: The examiner acknowledges that the Rule 132 Declaration establishes that the instant copolymers are softer and less prone to cracking than the prior arts. However, the examiner points out that the independent claim is directed to 2-14% acrylic acid. Meaning the butyl methacrylate may range from 86-98%. Applicant has not demonstrated that this unexpected property is applicable to the

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entire range claimed. For instance, applicant has shown that the prior art's copolymer at 90/10 (provided in the Declaration of 10/20/06); 80/20; and 85/15 is hard and brittle. However, the instant range includes 2:98. It is unclear if the plasticity, i.e. the brittleness of the copolymers change with the concentration of the respective monomers. For instance, the examiner cannot determine that a ratio of 2:98 of a MMA/AA copolymer compared to a BMA/AA would still exhibit brittleness or both the copolymers would have the same plasticity. Secondly, it is noted that the claims are directed to the copolymer in an amount of 5-95% in the composition and the unexpected results show the unexpectedness of the copolymer in a weight percent of 3.7%, which is outside the range 5-95%. For instance, if the instant copolymer was utilized in a higher weight percent, would the composition as a whole still be pliable and not prone to cracking? It cannot be conclusively determined if the composition as a whole would function in the same manner shown to be "unexpected" in the Declaration, i.e. softer and less prone to cracking, if the copolymer was utilized in the instant range of 5-95% (a higher weight percent) since the data in the Declaration only utilizes 3.7% of the copolymer. It is also noted that the prior art, Perronin, utilizes the copolymer in an amount of 13.7%. Therefore, applicant should make a comparison with the example that is closest to the instant invention.

Thus, the claimed ranges are not commensurate in scope with the unexpected results and therefore the Rule 132 Declaration is not sufficient to overcome the rejection.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person

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having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

**Claims 61, 64, 66, 68, 83, 85, and 87 are rejected under 35 U.S.C. 103(a) as being unpatentable over Strella et al (3,928,656) in view of Ohno (5854365) in view of Perronin et al (3,991,007) as evidenced by US 5,798,426.**

Strella discloses a method of developing electrostatic latent images with pressure sensitive toner. The toner comprises 19 parts of an ionic polymer (15.8%), 100 parts of tetrahydrofuran (ether solvent-83.3%), and 1 part Mogul black (pigment- 0.8%). See example 1, column 9. The ionic polymer discloses id butyl methacrylate-acrylic copolymer (94.2/5.8) with a TG of 46 degrees Celsius. See examples II. The examiner utilizes this intermediate composition to reject the claims. Strella teaches the use of a pigment or dye such as carbon black, a commercial red, blue, or yellow dye, or any other well-known pigment in an amount of 1-20%. See column 6, lines 4-16.

Although Strella teaches different pigments in the composition, the instant pigments are not specified. Further, the instant solvents are not taught.

Ohno teaches a toner composition wherein the pigment may be carbon black, an aniline black, acetylene black, naphthol yellow, Hansa yellow, rhodamine lake, alizarin lake, iron oxide

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red, phthalocyanine blue and indanthrene blue in the amount of 0.1-20%. See column 22, lines 25-40.

Perronin teaches the preparation of pigmentary particles coated with an organic polymer to allow dispersible of the pigment in a medium. Perronin discusses the importance of pigments in many fields such as textiles, plastics, inks, textiles, and cosmetics. Note column 1, lines 10-12. Perronin teaches the pigment composition may be advantageously used in numerous fields of application, such as the pigmentation of collodions for spinning, inks, plastics materials, paints, creams or other colored preparations. See column 4, lines 45-55. Perronin teaches examples of monomers which may be used in the process include 1) alkene-mono- or di-carboxylic acids, preferably the acids containing up to five carbon atoms, for example acrylic, methacrylic, etc.; 2) esters of these acids, such as methyl, ethyl, butyl, etc. see column 3, lines 40-60. Perronin teaches the pigments used in the composition may be mineral or organic pigments. Perronin teaches iron oxides, cadmium oranges, chrome yellows, molybdenum red and titanium dioxide as examples of mineral pigments. The organic pigments may belong to a variety of classes such as azo, azomethine, anthraquinone, phthalocyanine or indigoids. See column 2, line 65 to column 3, line 5. The solvents may be selected from gasolines, aromatic hydrocarbons such as benzene, toluene, xylene, halogenated hydrocarbons such as trichloroethylene, perchloroethylene, chlorobenzene, trichlorobenzene, chlorofluoromethanes, chlorofluoroethanes, alcohols such as methanol, ethanol, n-propanol, 1-methyl-ethanol, n-butanol, 2-methyl-propanol, 1,1-dimethyl-ethanol, ketones such as 2-propanone, 2-butanone, 4-methyl-2-pentanone, esters such as ethyl acetate, propyl acetate, 1-methyl-ethyl acetate, ethers such as diethyl ether, ethylpropyl ether, tetrahydrofuran, and 1,4-dioxan. See column 2, lines 45-61.

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US 5,798,426 discloses BMA/AA (90/10) has a weight of 69,400.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Strella and Ohno and utilize the instant pigment in the composition. One would have been motivated to do so since Strella teaches a variety of pigments may be utilized in the composition and Ohno teaches the functional equivalency of the instantly claimed pigment and the exemplified carbon black pigment taught in Strella. Therefore, one would have expected similar results by utilizing the instantly claimed pigments versus the prior art's pigment.

Secondly, it would have been obvious to one of ordinary skill in the art at the time the invention was made to combine the teachings of Strella, Ohno, and Perronin and substitute tetrahydrofuran with the claimed solvents. One would have been motivated to do so since Perronin teaches tetrahydrofuran and the claimed solvents are utilized as the organic solvents for the copolymers.

With regard to the copolymer molecular weight, the substitution of methyl for butyl will provide a molecular weight of about 68,000. The examiner cites US 5,798,426 as art of interest wherein '426 states that BMA/AA (90/10) has a weight of 69,400, which reads on about 68,000.

**Claims 61, 64, 66, 68, 81-88 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perronin et al (3,991,007) in view of Strella (3,928,656) as evidenced by US 5,798,426.**

Perronin teaches the preparation of pigmentary particles coated with an organic polymer to allow dispersible of the pigment in a medium. Perronin discusses the importance of pigments in many fields such as textiles, plastics, inks, textiles, and cosmetics. Note column 1, lines 10-12.

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Perronin teaches the pigment composition may be advantageously used in numerous fields of application, such as the pigmentation of collodions for spinning, inks, plastics materials, paints, creams or other colored preparations. See column 4, lines 45-55. Perronin teaches examples of monomers which may be used in the process include 1) alkene-mono- or di-carboxylic acids, preferably the acids containing up to five carbon atoms, for example acrylic, methacrylic, etc.; 2) esters of these acids, such as methyl, ethyl, butyl, etc. see column 3, lines 40-60. Perronin teaches the pigments used in the composition may be mineral or organic pigments. Perronin teaches iron oxides, cadmium oranges, chrome yellows, molybdenum red and titanium dioxide as examples of mineral pigments. The organic pigments may belong to a variety of classes such as azo, azomethine, anthraquinone, phthalocyanine or indigoids. See column 2, line 65 to column 3, line 5. The solvents may be selected from gasolines, aromatic hydrocarbons such as benzene, toluene, xylene, halogenated hydrocarbons such as trichloroethylene, perchloroethylene, chlorobenzene, trichlorobenzene, chlorofluoromethanes, chlorofluoroethanes, alcohols such as methanol, ethanol, n-propanol, 1-methyl-ethanol, n-butanol, 2-methyl-propanol, 1,1-dimethyl-ethanol, ketones such as 2-propanone, 2-butanone, 4-methyl-2-pentanone, esters such as ethyl acetate, propyl acetate, 1-methyl-ethyl acetate, ethers such as diethyl ether, ethylpropyl ether, tetrahydrofuran, and 1,4-dioxan. See column 2, lines 45-61.

Example 6 provides a composition with 100 parts a pigment, 350 parts heptane, 90 parts methyl methacrylate, and 10 parts acrylic acid. The pigment composition D is then combined in an amount of 190 parts (50% pigment and 50% 90/10 copolymer of MMA-AA), 50% nitrocellulose resin in butyl acetate in 86 parts, 210 parts ethyl acetate (ester solvent), 22 parts butanol, 155 parts isopropanol, and 28 parts butyl phthalate (plasticizer). Example 13 teaches a



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copolymer of methyl methacrylate and acrylic acid in the amount of 80-20. Note that nitrocellulose is in the amount of about 6.2% of the total composition; the pigment is in the amount of 13.7%, and the copolymer in the amount of 13.7%.

Although Perronin teaches that the monomers may be selected from several monomer including butyl and methyl esters of methacrylic acid, Perronin does not expressly teach the instantly claimed butyl methacrylate-acrylic acid copolymer.

Strella discloses a method of developing electrostatic latent images with pressure sensitive toner. Strella teaches preparing a colored toner for forming a uniform dispersion of dye or pigment in a resinous material. The polymers taught include butyl methacrylate-acrylic acid, for providing toner compositions. See column 6, lines 15-30 and examples. The toner comprises 19 parts of an ionic polymer (15.8%), 100 parts of tetrahydrofuran (ether solvent-83.3%), and 1 part Mogul black (pigment- 0.8%). See example 1, column 9. The ionic polymer discloses is butyl methacrylate-acrylic copolymer (94.2/5.8). See examples II. The examiner utilizes this intermediate composition to reject the claims. The examiner utilizes this intermediate composition to reject the claims. Strella teaches the use of a pigment or dye such as carbon black, a commercial red, blue, or yellow dye, or any other well-known pigment in an amount of 1-20%. See column 6, lines 4-16.

US 5,798,426 discloses BMA/AA (90/10) has a weight of 69,400.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to look at Strella and utilize the instantly claimed copolymer. Strella demonstrates the prior art wherein it is known to utilize the instant copolymer to coat a pigment for dispersal in a solvent. Therefore, a skilled artisan would have been motivated to look to Strella and utilize the

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instant copolymer with the expectation of similar results since Strella teaches butyl methacrylate-acrylic acid copolymer as a suitable polymer to coat pigments and Perronin suggests the use of several monomers including esters of methacrylic acids wherein the alkyl may be butyl to coat the pigment.

With regard to the preamble, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

With regard to the functional limitations, it is the examiner's position that Perronin's composition is capable of leaving a water-insoluble film on the nail since the compositions are substantially similar.

With regard to claim 82, Perronin teaches 6.2% nitrocellulose and not instantly claimed 0.5-5%. However, it would have been obvious to a skilled artisan to manipulate this concentration during routine optimization and experimentation. It should be noted that generally difference in concentrations do not support the patentability of subject matter encompassed by the prior art unless there is evidence indicating such as concentration is critical. See *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955).

With regard to the copolymer molecular weight, the substitution of methyl for butyl will provide a molecular weight of about 68,000. The examiner cites US 5,798,426 as art of interest wherein '426 states that BMA/AA (90/10) has a weight of 69,400, which reads on about 68,000.

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Although Perronin teaches that the monomers may be selected from several monomer including butyl and methyl esters of methacrylic acid, Perronin does not expressly teaches the instantly claimed butyl methacrylate-acrylic acid copolymer.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to look at the guidance provided by Perronin and utilize either methyl methacrylate or instant butyl methacrylate. One would have been motivated to do so since Perronin teaches several monomers may be copolymerized such as esters of methacrylic acids including methyl and butyl. Thus a skilled artisan would have been motivated to substitute the exemplified methyl methacrylate with butyl methacrylate, i.e. substitute the exemplified methyl with butyl, since both are analogous compounds, i.e. both are alkyl esters of methacrylic acids. Therefore, absent unexpected results, substituting the prior art's methyl with instant butyl is deemed obvious to a skilled artisan.

With regard to the preamble, a preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the

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body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

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### ***Conclusion***

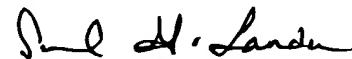
All the claims are rejected.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Sharmila Gollamudi Landau whose telephone number is 571-272-0614. The examiner can normally be reached on M-F (8:00-5:30), alternate Fridays off.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Johann Richter can be reached on 571-272-0646. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Sharmila Gollamudi Landau  
Primary Examiner  
Art Unit 1616

10/10/07